

**Title:**

Individual group efficacy beliefs and performance motivation: A mediational approach

Author: Steiner S¹

¹Institut für Sportwissenschaft, Universität Bern, Schweiz

Abstract:**Introduction:**

According to the theoretical model of Cranach, Ochsenein, and Valach (1986) understanding group actions needs consideration of aspects at both the group level and the level of individual members. For example individual action units constituting group actions are motivated at the individual level while potentially being affected by characteristics of the group. Theoretically, group efficacy beliefs could be a part of this motivational process as they are an individual's cognitive contents about group-level abilities to perform well in a specific task. Positive relations between group level efficacy-beliefs and group performance have been reported and Bandura and Locke (2003) argue that this relationship is being mediated by motivational processes and goal setting.

The aims of this study were a) to examine the effects of group characteristics on individual performance motivation and b) to test if those are mediated by individual group efficacy beliefs.

Methods:

Forty-seven students ($M=22.83$ years, $SD=2.83$, 34% women) of the university of Berne participated in this scenario based experiment. Data were collected on two collection points. Subjects were provided information about fictive team members with whom they had to perform a group triathlon. Three values (low, medium, high) of the other team members' abilities to perform in their parts of the triathlon (swimming and biking respectively) were combined in a 3x3 full factorial design (Anderson, 1982) yielding nine groups. Subjects were asked how confident they were that the teams would perform well in the task (individual group efficacy beliefs), and to provide information about their motivation to perform at their best in the respective group contexts (performance motivation). Multilevel modeling (Mplus) was used to estimate the effects of the factors *swim* and *bike*, and the context-varying covariate *individual group efficacy beliefs* on performance motivation. Further analyses were undertaken to test if the effects of group contexts on performance motivation are mediated by individual group efficacy beliefs.

Results:

Significant effects were reported for both the group characteristics ($\beta_{\text{swim}} = 7.86$; $\beta_{\text{bike}} = 8.57$; both $p < .001$) and the individual group efficacy beliefs ($\beta_{\text{igeb}} = .40$, $p < .001$) on performance motivation. The subsequent mediation model indicated that the effects of group characteristics on performance motivation were partly mediated by the individual group efficacy beliefs of the subjects with significant mediation effects for both factors *swim* and *bike*.

Discussion/Conclusion:

The results of the study provide further support for the motivational character of efficacy beliefs and point out a mechanism by which team characteristics influence performance relevant factors at the level of individual team members. The study indicates that high team abilities lead to augmented performance motivation, adding a psychological advantage to teams already high on task relevant abilities. Future investigations will be aiming at possibilities to keep individual performance motivation high in groups with low task relevant abilities. One possibility could be the formulation of individual task goals.

References:

- Anderson, N. H. (1982). *Methods of information integration theory*. New York: Academic Press.
- Bandura, A. & Locke, E. A. (2003). Negative self-efficacy and goal effects revisited. *Journal of Applied Psychology*, 88, 87-99.
- Cranach, M. von, Ochsenein, G. & Valach, L. (1986). The group as a self-active system: Outline of a theory of group action. *European Journal of Social Psychology*, 16, 193-229.